Journal of Luminescence 59 (1994) 385–387
North-Holland

JOURNAL OF
LUMINESCENCE

Author index

Aleksić, A.Dj., M.F. Zloh, I. Juranić, Mechanism of excitation, emission of papaverine molecule: fluorescence polarization spectroscopy study, MO calculation of transition moments 59 (1994) 27
Alexander, E.J., see Pappalardo, R.G. 59 (1994) 113

Balda, R., J. Fernández, H. Eilers, W.M. Yen, Site-selective spectroscopy of Eu^{3+} ions in fluoride glasses 59 (1994) 81
Barr, J.R.M., see Perry, I.R. 59 (1994) 39
Bergeron, J.Y., see Ganguly, T. 59 (1994) 247
Blasse, G., see Lizzo, S. 59 (1994) 185
Blasse, G., see Ellens, A. 59 (1994) 293
Blasse, G., see Schipper, W.J. 59 (1994) 377
Blazey, K.W., see Silversmith, A.J. 59 (1994) 269
Bokhimi, see Flores J., C. 59 (1994) 257
Boonyarith, T., J.P.D. Martin, N.B. Manson, Hyperfine resonances in the tetragonal centre of Ho^{3+} in CaF_2 59 (1994) 361
Borel, C., see Souriau, J.C. 59 (1994) 349
Bray, K.L., see Wamsley, P.R. 59 (1994) 11
Brocklesby, W.S., A. Pearson, A spectroscopic study of praseodymium-doped gallium–lanthanum–sulphide glass 59 (1994) 333
Brunold, T.C., A. Hauser, H.U. Güdel, Absorption, luminescence spectroscopy of ferrate (VI) doped into crystals of K_2MO_4 (M = S, Se, Cr, Mo) 59 (1994) 321
Burgdorff, C., H.-G. Löhmannsröben, Photophysical properties of tetracene derivatives in solution III. Thermally activated nonradiative processes, triplet state properties 59 (1994) 201

Cerrina, F., see Moses, W.W. 59 (1994) 89
Chen, H., see Zhang, G. 59 (1994) 315
Chen, T., see Zhang, G. 59 (1994) 315
Chertanov, M., O.K. Moune, B. Piriou, J. Dexpert-Ghys, M. Faucher, M. Guittard, Spectroscopic study of crystalline Nd_2O_2S: Optical absorption measurements, crystal field analysis, intensity calculations 59 (1994) 231
Cho, D.W., see Kim, Y.H. 59 (1994) 209

De, R., see Jana, P. 59 (1994) 1
de Paula, A.M., J.F. Ryan, H.J.W. Eakin, M. Tatham, R.A. Taylor, A.J. Turberfield, Picosecond photoluminescence intensity correlation measurements of hot carriers in $GaAs/Al_xGa_{1-x}As$ quantum wells 59 (1994) 303
Derenzo, S.E., see Moses, W.W. 59 (1994) 89
Dexpert-Ghys, J., see Chertanov, M. 59 (1994) 231
Durocher, G., see Ganguly, T. 59 (1994) 247

Eakin, H.J.W., see de Paula, A.M. 59 (1994) 303
Eilers, H., see Balda, R. 59 (1994) 81
Eilers, H., see Jia, W. 59 (1994) 279
Elcov, A.V., A.I. Ponyaev, N.P. Smirnova, H. Hartmann, F.W. Müller, R. Schütz, On the absorption, emission properties of substituted 9-benzoyl- or 9-phenylsulphonyl-fluoresceines 59 (1994) 51
Ellens, A., A. Meijerink, G. Blasse, ^6I emission, vibronic transitions of Eu^{2+} in $KMgF_3$ 59 (1994) 293
Escudero D., R., see Flores J., C. 59 (1994) 257

Fabris, J.L., see Muller, M. 59 (1994) 289
Farmer, L., see Ganguly, T. 59 (1994) 247
Faucher, M., see Chertanov, M. 59 (1994) 231
Fernández, J., see Balda, R. 59 (1994) 81
Flores J., C., J. García M., J. Hernández A., Bokhimi, H. Murrieta S., R. Escudero D., Fluorescence study of Eu–Ba–Cu–O type compounds 59 (1994) 257
Fujita, Sg., see Yamaguchi, S. 59 (1994) 341
Fujita, Sz., see Yamaguchi, S. 59 (1994) 341

Ganguly, T., see Jana, P. 59 (1994) 1
Ganguly, T., W. Li, J.Y. Bergeron, L. Farmer, D. Gravel, G. Durocher, Time-resolved luminescence technique as a probe for phase transitions in some polysiloxane liquid crystals bearing the chromophore 2,7-dimethoxy-N-methyl carbazole (DMNMC) as a pendant group 59 (1994) 247
García M., J., see Flores J., C. 59 (1994) 257

Ge, W., W.D. Schmidt, M.D. Sturge, L.N. Pfeiffer, K.W. West, Electronic states in GaAs–AlAs short-period superlattices: energy levels, symmetry 59 (1994) 163
Gogolin, O., see Woggon, U. 59 (1994) 135
Gravel, D., see Ganguly, T. 59 (1994) 247
Güdel, H.U., see Brunold, T.C. 59 (1994) 321
Guittard, M., see Chertanov, M. 59 (1994) 231

Hartmann, H., see Elcov, A.V. 59 (1994) 51
Hauser, A., see Brunold, T.C. 59 (1994) 321
Hernandes, A.C., see Muller, M. 59 (1994) 289
Hernández A., J., see Flores J., C. 59 (1994) 257
Hoffman, K., see Jia, W. 59 (1994) 279
Hömmerich, U., see Jia, W. 59 (1994) 279
Hotchandani, S., A.C. Testa, Influence of electron donor substituents on the luminescence behavior of a 2-amino-azine 59 (1994) 59
Hurtubise, R.J., S.M. Ramasamy, Comparative study of the phosphorescence properties of aminocarboxylic acids adsorbed on sodium acetate, deuterated sodium acetate 59 (1994) 147

Ichino, K., see Yamaguchi, S. 59 (1994) 341

Jaanson, N., see Kalder, K. 59 (1994) 71
Jana, P., R. De, T. Ganguly, Steady state, time resolved spectroscopic studies of the photoinduced electron-transfer reactions between electron donor xylenol, acceptor tetracyanoquinodimethane in acetonitrile at room temperature 59 (1994) 1
Jia, W., H. Liu, Y. Wang, U. Hömmerich, H. Eilers, K. Hoffman, W.M. Yen, Stress effects on the fluorescence spectra of tetravalent chromium in some crystalline hosts 59 (1994) 279
Juranić, I., see Aleksić, A.Dj. 59 (1994) 27

Kalder, K., V. Korrovits, V. Nagirnyi, S. Zazubovich, N. Jaanson, Off-centre effects in the triplet relaxed excited state of Ga^+ centres in potassium halides 59 (1994) 71
Kang, S.G., see Kim, Y.H. 59 (1994) 209
Kato, R., see Morikawa, O. 59 (1994) 19
Kawakami, Y., see Yamaguchi, S. 59 (1994) 341
Kim, D., see Kim, Y.H. 59 (1994) 209
Kim, Y.H., D.W. Cho, S.G. Kang, M. Yoon, D. Kim, Excited-state intramolecular proton transfer emission of piroxicam in aqueous β-cyclodextrin solutions 59 (1994) 209
Klingshirn, C., see Woggon, U. 59 (1994) 135
Koepke, Cz., A. Lempicki, Excited-state absorption in $ZnWO_4$ crystal 59 (1994) 33
Korrovits, V., see Kalder, K. 59 (1994) 71
Krissinel', E.B., S.I. Mackarchuck, Numerical treatment of the kinetics of luminescence quenching in solids 59 (1994) 219
Kurobori, T., H. Yonezawa, N. Takeuchi, Blue emission of OH^--perturbed Cu^+ center in NaCl 59 (1994) 157

Laberge, M., D.J. Simkin, M. Nafi, V. Lucas, J. Théry, D. Vivien, Site-selective spectroscopy of Eu(III) β-aluminogallate 59 (1994) 263
Langbein, W., see Woggon, U. 59 (1994) 135
Lempicki, A., see Koepke, Cz. 59 (1994) 33
Lenth, W., see Silversmith, A.J. 59 (1994) 269
Leupold, D., see Oberländer, S. 59 (1994) 125
Li, C., see Souriau, J.C. 59 (1994) 349
Li, M.S., see Muller, M. 59 (1994) 289
Li, W., see Ganguly, T. 59 (1994) 247
Liu, H., see Jia, W. 59 (1994) 279
Lizzo, S., A. Meijerink, G. Blasse, Luminescence of divalent ytterbium in alkaline earth sulphates 59 (1994) 185
Löhmannsröben, H.-G., see Burgdorff, C. 59 (1994) 201
López Arbeloa, F., see López Arbeloa, T. 59 (1994) 369
López Arbeloa, I., see López Arbeloa, T. 59 (1994) 369
López Arbeloa, T., F. López Arbeloa, M.J. Tapia Estévez, I. López Arbeloa, Binary solvent effects on the absorption, emission of 7-aminocoumarins 59 (1994) 369
Lucas, V., see Laberge, M. 59 (1994) 263

Macfarlane, R.M., see Silversmith, A.J. 59 (1994) 269
Mackarchuck, S.I., see Krissinel', E.B. 59 (1994) 219
Manson, N.B., see Boonyarith, T. 59 (1994) 361
Marek, N., see Szabó, K. 59 (1994) 277
Martin, J.P.D., see Boonyarith, T. 59 (1994) 361
Meijerink, A., see Lizzo, S. 59 (1994) 185
Meijerink, A., see Ellens, A. 59 (1994) 293
Miniscalco, W.J., see Pappalardo, R.G. 59 (1994) 113
Moncorgé, R., see Souriau, J.C. 59 (1994) 349
Morikawa, O., R. Kato, Luminescence study of O_2^- centers in KBr under uniaxial stress 59 (1994) 19
Moses, W.W., S.E. Derenzo, M.J. Weber, A.K. Ray-Chaudhuri, F. Cerrina, Scintillation mechanisms in cerium fluoride 59 (1994) 89
Moune, O.K., see Chertanov, M. 59 (1994) 231
Müller, F.W., see Elcov, A.V. 59 (1994) 51
Muller, M., J.L. Fabris, A.C. Hernandes, M.S. Li, 570 nm, 4.8 μm emissions in Yb^{2+}/CN^- double doped KCl 59 (1994) 289
Murrieta S., H., see Flores J., C. 59 (1994) 257

Nafi, M., see Laberge, M. 59 (1994) 263
Nagirnyi, V., see Kalder, K. 59 (1994) 71

Oberländer, S., D. Leupold, Instantaneous fluorescence quantum yield of organic molecular systems: information content of its intensity dependence 59 (1994) 125
Oczkowski, H.L., see Pietkun, A. 59 (1994) 65

Pappalardo, R.G., T.E. Peters, W.J. Miniscalco, E.J. Alexander, Room-temperature line emission at 1.2 μm from chromium-activated barium orthotitanate 59 (1994) 113
Pearson, A., see Brocklesby, W.S. 59 (1994) 333
Perry, I.R., A.C. Tropper, J.R.M. Barr, Micro-fluorescence profiling of erbium-doped fibre preforms 59 (1994) 39
Peters, T.E., see Pappalardo, R.G. 59 (1994) 113
Pfeiffer, L.N., see Ge, W. 59 (1994) 163
Pietkun, A., H.L. Oczkowski, Trap spectroscopy of quartz by the fractional glow technique 59 (1994) 65
Piriou, B., see Chertanov, M. 59 (1994) 231
Ponyaev, A.I., see Elcov, A.V. 59 (1994) 51

Ramasamy, S.M., see Hurtubise, R.J. 59 (1994) 147
Ray-Chaudhuri, A.K., see Moses, W.W. 59 (1994) 89
Ryan, J.F., see de Paula, A.M. 59 (1994) 303

Schipper, W.J., G. Blasse, On the recombination mechanism in X-ray storage phosphors based on lanthanum fluoride 59 (1994) 377
Schmidt, W.D., see Ge, W. 59 (1994) 163
Schütz, R., see Elcov, A.V. 59 (1994) 51
Shinzato, T., see Yamaguchi, S. 59 (1994) 341
Silversmith, A.J., W. Lenth, K.W. Blazey, R.M. Macfarlane, Photon gated spectral hole burning in $SrTiO_3:Cr^{3+}$ 59 (1994) 269
Simkin, D.J., see Laberge, M. 59 (1994) 263
Sirtlanov, M.R., Nonradiative relaxation of trivalent chromium in glass 59 (1994) 101
Smirnova, N.P., see Elcov, A.V. 59 (1994) 51
Souriau, J.C., C. Borel, Ch. Wyon, C. Li, R. Moncorgé, Spectroscopic properties, fluorescence dynamics of Er^{3+}, Yb^{3+} in $CaYAlO_4$ 59 (1994) 349
Sturge, M.D., see Ge, W. 59 (1994) 163
Szabó, K., N. Marek, The fluorescent behaviour of 2,2′-bipyridine after excitation by the excimer laser 59 (1994) 277

Takeuchi, N., see Kurobori, T. 59 (1994) 157
Tapia Estévez, M.J., see López Arbeloa, T. 59 (1994) 369
Tatham, M., see de Paula, A.M. 59 (1994) 303
Taylor, R.A., see de Paula, A.M. 59 (1994) 303
Testa, A.C., see Hotchandani, S. 59 (1994) 59
Théry, J., see Laberge, M. 59 (1994) 263
Tropper, A.C., see Perry, I.R. 59 (1994) 39
Turberfield, A.J., see de Paula, A.M. 59 (1994) 303

Vivien, D., see Laberge, M. 59 (1994) 263

Wamsley, P.R., K.L. Bray, The effect of pressure on the luminescence of $Cr^{3+}:YAG$ 59 (1994) 11
Wang, Y., see Jia, W. 59 (1994) 279
Weber, M.J., see Moses, W.W. 59 (1994) 89
West, K.W., see Ge, W. 59 (1994) 163
Wind, O., see Woggon, U. 59 (1994) 135
Woggon, U., O. Wind, W. Langbein, O. Gogolin, C. Klingshirn, Confined biexcitons in CuBr quantum dots 59 (1994) 135
Wyon, Ch., see Souriau, J.C. 59 (1994) 349

Yamaguchi, S., T. Shinzato, K. Ichino, Y. Kawakami, Sz. Fujita, Sg. Fujita, Photopumped lasing properties in ZnCdSe–ZnSSe multiple quantum wells 59 (1994) 341
Yamashita, N., Photoluminescence spectra of the Eu^{2+} center in SrO:Eu 59 (1994) 195
Yao, L., see Zhang, G. 59 (1994) 315
Yen, W.M., see Balda, R. 59 (1994) 81
Yen, W.M., see Jia, W. 59 (1994) 279
Ying, X., see Zhang, G. 59 (1994) 315
Yonezawa, H., see Kurobori, T. 59 (1994) 157
Yoon, M., see Kim, Y.H. 59 (1994) 209

Zazubovich, S., see Kalder, K. 59 (1994) 71
Zhang, G., X. Ying, L. Yao, T. Chen, H. Chen, Spectroscopic investigation of Pr^{3+} luminescence in $Sr_xBa_{1-x}Nb_2O_6$ crystal 59 (1994) 315
Zloh, M.F., see Aleksić, A.Dj. 59 (1994) 27

Journal of Luminescence 59 (1994) 389–390
North-Holland

JOURNAL OF
LUMINESCENCE

Subject index

Absorption
– excited state 125
Absorption spectra 209
Absorption spectroscopy 321
Absorption spectroscopy 369
Alkali halides 71, 157

Band structure 163
Biexciton 135

Chalcogenide glass 333
Cis–trans conformation 277
Co-dopant 39
Cu^- center 157
Cyclodextrins 209

Data fitting 219
Defect center 289
Delafossite compounds 257
Distribution 39
Divalent ytterbium 185
Donor–acceptor pair 1
Dopant 39
Dyes 369

Electron spin resonance 195
Electron transfer 219
Electron transfer 1
Emission spectra 289
Energy transfer 1
– site-to-site 263
Excimer laser 277
Excitation polarization 27
Excitation spectra 89
Excited state
– triplet 71
Excited state proton transfer
– intramolecular 209
Exciton 163
– localized 341
Exciton annihilation 125

Fiber amplifiers 333
Fluorescence 89, 257, 369
– NIR 279
Fluorescence intensity 277
Fluorescence lifetime 1
Fluorescence polarization 27
Fluorescence quantum yield 125
Fluorescence spectra 209
Fluoresence line narrowing 333

Gain 341

H-bondings 369
Hexagonal aluminates 263
Hole burning 361
Hyperfine interactions 361

Internal conversion 201, 369
Intersystem crossing 201
Irradiation energy 277

Jahn–Teller effect 71

Laser crystal 349
Lasing properties
– photopumped 341
Lifetime 39, 315
– radiative 163
Line emission 113
Line narrowing 81
Liquid crystals
– polysiloxane 247
Luminescence
– defect 289
– near infrared 113
– polarized 71
– time-resolved 71, 135, 247
Luminescence quenching 219
Luminescence spectroscopy 59, 321

Multiple quantum wells 303

Off-center effect 71
OH^- on 157
Optical absorption 231
Optical double resonance
– microwave 361
Optically detected magnetic resonance (ODMR) 361

Organic solds 147
O_2^- center 19

Phase transition
– in polysiloxanes 247
Phonon side band 19
Phonons
– nonequilibrium 303
Phosphorescence 147
Photoionization 185, 269
– two-step 269
Photoluminescence 195, 257
– time-resolved 303
Photophysical properties 51, 201
Piezospectroscopy 279
Piroxicam 209
Polarization spectroscopy 59
Pressure 11

Quantum dots
– semiconductor 135
Quantum efficiency 89

Rare earth doped glasses 81
Relaxation
– nonradiative 101
Rubrene 201

Scintillation 89
Site-selective spectroscopy 81, 263, 333
^{6}I emission 293
Spectral hole burning
– photon-gated 269
Spectroscopy 315
– solid state 33, 361
– spatially resolved 39
– time-resolved 1, 101
Spin–orbit coupling 11
Stimulated emission 349
Storage phosphors 377
Superconductor 257
Superlattice
– semiconductor 163

Tetracene derivatives 201
Thermal activation 201
Thermoluminescence 65, 377
Transition metal complexes
– excited state 33
Transition moments 27
Transition probabilities 231
Trap spectroscopy 65
Trigonal distortion 11
Triplet formation
– enhanced 51
Triplet state properties 201
Two-photon excitation 277

Uniaxial stress 19

Vibronic transitions 293

Zeeman effect 361
Zero-phonon line 19

Journal of Luminescence 59 (1994) 391–392
North-Holland

JOURNAL OF
LUMINESCENCE

Materials index

Acetonitrile 1
Aggregates 125
Alkali halides 157
Aluminium, phosphorous co-dopants 39
Aminopyridine derivatives 59

Barium ortho-titanate 113
$BaSO_4:Yb^{2+}$ 185

$CaF_2:Ho^{3+}$ 361
$CaSO_4:Yb^{2+}$ 185
$CaYAlO_4$ 349
CeF_3 89
Clusters 125
Cr^{4+} 113
Cr^{3+} 269
Cr^{3+}:YAG 11
CuBr 135
Cyclodextrins 209

Dimethoxy methyl carbazole 247

Erbium 39
Er^{3+} 349
Ethanol 147
Ethanol-d 147
$EuBa_2Cu_3O_{7-x}$ 257
Eu^{3+} 81
Eu_2BaCuO_5 257

FeO_4^{2-} 321
5,11-dichloro-6,12-diphenyltetracene 201
5-iodo-6,11,12-triphenyltetracene 201
5,6-dichloro-11,12-diphenyltetracene 201
5,12-diacetoxytetracene 201
Fluoride glass 81

GaAs/AlGaAs 303
GaAs–AlAs 163
Gallium–lanthanum–sulfide 333
Germanium 39
Glass 333

Hexagonal aluminates 263

Isoquinoline 27

KBr 19
KBr:Ga 71
KCl 19
KCl:Ga 71
$KCl:Yb^{2+}/CN^-$ 289
KI:Ga 71
$KMgF_3:Eu^{2+}$ 293
K_2CrO_4 321
K_2MoO_4 321
K_2SeO_4 321
K_2SO_4 321

LaF_3 89, 377
LaF_3:Ce (0.01, 1, 10, 50 mol.%) 89
Light harvesting antenna 125

$Mg_2SiO_4:Cr^{4+}$ 279

NaCl 19
NaCl single crystal 157
NaCl:Ga 71
Neodymium oxysulfide 231

OH^- ion 157

p-aminobenzoic acid 147
Papaverine 27
Perchloric acid ($HClO_4$) 277
Phosphate glass:Cr^{3+} 101
p-hydroxybenzoic acid 147
Piroxicam 209
Polysiloxane liquid crystals 247
Potassium permanganate ($KMnO_4$) 277
Pr^{3+} 333

RbBr 19
RbCl 19
RbCl:Ga 71
RbI 19
Rubrene 201

7-aminocoumarins 369
Silica optical fibre preforms 39
Silicate glass:Cr^{3+} 101
SiO_2 65
Sodium acetate 147

Sodium chloride 147
Sodium hydroxide 147
Sodium hydroxide (NaOH) 277
$Sr_xBa_{1-x}Nb_2O_6:Pr^{3+}$ 315
$SrO:Eu^{3+}$ 195
$SrO:Eu^{2+}$ 195
$SrSO_4:Yb^{2+}$ 185
$SrTiO_3:Cr^{3+}$ 269

Tetracene derivatives 201
Tetracyanoquinodimethane 1
2,8-dibromo-5,6,11,12-tetrakis-(p-bromophenyl)-tetracene 201
2,2′-bipyridine ($C_{10}H_8N_2$) 277

Water/ethanol mixtures 369

Xanthene dyes 51

$Y_3Al_5O_{12}:Cr^{4+}$ 279
$Y_2SiO_5:Cr^{4+}$ 279
$YAG:Cr^{3+}$ 11
Yb^{3+} 349
Yb^{2+} 185

ZnCdSe–ZnSSe 341
$ZnWO_4$ 33